

REMARKS

In the non-final Office Action, the Examiner makes the following observations:

- Applicants' claim to priority under 35 U.S.C. § 119(e) to U.S. Provisional Patent Application No. 60/176/928 ("the Provisional Application") is denied because the Provisional Application allegedly fails to provide adequate support or enablement, under 35 U.S.C. § 112, first paragraph, for the pending claims;
- the specification is objected to because of alleged informalities;
- Claims 1, 6-14, 19, 22, 23, 27, 30, 31, and 38 are objected to because of alleged minor informalities;
- Claim 14 is rejected on the ground of non-statutory obviousness-type double patenting as allegedly unpatentable over claims 1-4 of HALL et al. (U.S. Patent No. 7,283,512) in view of claims 1-14 of BUYUKKOC et al. (U.S. Patent No. 7,283,512);
- Claims 39, 42-50, and 54-65 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter;
- claims 1-3, 5, 11, 12, 14-16, 18, 31, 39, 42, 43, 45, and 58 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. (U.S. Patent No. 6,463,062) in view of GAI (U.S. Patent No. 6,167,445);
- Claims 4 and 17 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of NOAKE et al. (U.S. Patent No. 6,751,222);
- Claims 6, 8, 9, 19-21, 23-26, 46-48, and 50 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of CHRISTIE et al. (U.S. Patent No. 6,690,656);
- Claims 7, 22, and 49 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further of view of FARRIS et al. (U.S. Patent No. 6,154,445);
- Claim 10 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of VANDERVORT et al. (U.S. Patent No. 5,761,191), and in still further view of HORN et al. (U.S. Patent No. 5,276,676);
- Claims 13, 38, and 65 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of BASSO et al. (U.S. Patent No. 6,633,539);
- Claims 27-29 and 54-56 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of KOBAYASHI et al. (U.S. Patent No. 5,896,371);

- Claims 30 and 57 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of SMITH et al. (U.S. Patent No. 6,222,823);
- Claims 32-37 and 59-64 are rejected under 35 U.S.C. § 103(a) allegedly as unpatentable over BUYUKKOC et al. in view of GAI, and in further view of KILKKI et al. (U.S. Patent No. 6,041,039); and
- Claim 44 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of NOAKE et al.

Applicants respectfully traverse the above objections and rejections.

By way of the present amendment, Applicants amend claims 1-10, 12-29, 31-39, 42-50, and 55-65 to improve form; and cancel claims 11, 30, and 54 without prejudice or disclaimer. No new matter has been added by way of the present amendment. Claims 1-10, 12-29, 31-39, 42-50, and 55-81 are pending, of which claims 66-81 were previously withdrawn in response to a restriction requirement.

Refusal of Applicants' Priority Claim to Provisional Application

In the Office Action at pages 3 and 4, the Examiner denies the Applicants' claim to priority under 35 U.S.C. § 119(c) to the Provisional Application because the Provisional Application allegedly fails to provide adequate support or enablement, under 35 U.S.C. § 112, first paragraph, for the pending claims. Applicants respectfully disagree and submit that the features recited in the pending claims are fully supported in the Provisional Application.

However, without acquiescing in this allegation, Applicants respectfully request that the Examiner defer determining whether claims are adequately supported by the Provisional Application under 35 U.S.C. § 112, first paragraph, until time of allowance or until such time that the Examiner applies a reference with an effective date precedes Applicants' filing data but

does not precede Applicants' effective filing date, to allow any such determination to consider future claim amendments, if any.

Objection to the Specification

The Examiner objects to the Specification due to alleged informalities. Without acquiescing in this objection and merely to expedite prosecution, Applicants amend the specification, as requested by the Examiner, to address the concerns raised in the Office Action at pages 4 and 5. For at least these reasons, reconsideration and withdrawal of the objection to the Specification are respectfully requested.

Objection to the Claims

Pending claims 1, 6-10, 12-14, 19, 22, 23, 27, 31, and 38 stand objected to because of alleged minor informalities. Without acquiescing in this objection and merely to expedite prosecution, Applicants amend claims 1, 6-10, 12-14, 19, 22, 23, 27, 31, and 38, as requested by the Examiner, to address the concerns raised in the Office Action at pages 5 and 6. For at least these reasons, reconsideration and withdrawal of the objection to claims 1, 6-10, 12-14, 19, 22, 23, 27, 31, and 38 are respectfully requested.

Rejection based on Non-Statutory Obviousness-Type Double Patenting

Claim 14 stands rejected on the ground of non-statutory obviousness-type double patenting as allegedly unpatentable over claims 1-4 of HALL et al. in view of claims 1-14 of BUYUKKOC et al.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit, herewith, a Terminal Disclaimer to HALL et al. to overcome the non-statutory obviousness-type double patenting rejection. For at least this reason, Applicants respectfully request that the non-statutory obviousness-type double patenting rejection of claim 14 be withdrawn.

Rejection under 35 U.S.C. § 101

Pending claims 39, 42-50, and 55-65 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicants respectfully traverse this rejection. Without acquiescing in this objection and merely to expedite prosecution, Applicants amend claims 39, 42-50, and 55-65 to address the statutory subject matter concerns raised by the Examiner in the Office Action at pages 11-13. For at least these reasons, Applicants submit that pending claims 39, 42-50, and 55-65 are directed to statutory subject matter. Accordingly, reconsideration and withdrawal of the rejection of claims 39, 42-50, and 55-65 under 35 U.S.C. § 101 are respectfully requested.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al. and GAI

Pending claims 1-3, 5, 12, 14-16, 18, 31, 39, 42, 43, 45, and 58 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI. Applicants respectfully traverse this rejection.

For example, independent claim 1, as amended, is directed to a method in an Asynchronous Transfer Mode (ATM) network including an ingress switch and an egress switch, where the ingress switch serves an ingress device operated by a calling party and the egress

switch serves an egress device operated by a called party. The method comprises receiving, in the ingress switch, a signaling message from the ingress device; providing the signaling message to a signaling intercept processor associated with the ingress switch; propagating the signaling message from the signaling intercept processor to a policy server, the policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated; identifying, in the policy profile database and based on the signaling message, a policy for the calling party; determining, in the policy server and based on the signaling message, that the policy for the calling party is to be enforced; executing, in the policy server and based on the signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party. The method includes determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and where determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. The method further includes establishing a connection path between the ingress switch and the egress switch based on the determination that the policy condition is satisfied for each policy feature, of the one or more policy features identified by the

policy for the calling party. BUYUKKOC et al. and GAI do not disclose or suggest one or more of these features.

For example, the combination of BUYUKKOC et al. and GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. With respect to claim 11 (canceled herein), the Examiner appears to allege that substantially similar features are disclosed in BUYUKKOC et al. at step 840 of FIG. 8; steps 1035 and 1040 of FIG. 10; col. 13, lines 1-7 and 45-47; col. 13, line 64-col. 14, line 67; col. 14, line 7-col. 18, line 45; col. 17, line 30-40; col. 19, lines 25-40, col. 21, lines 19-30; and Tables VII and VIII and GAI at FIG. 4; col. 4, line 50- col. 5, line 20; col. 13, line 60, Col. 14, lines 1-25; col. 18, lines 45-65 (Office Action at pages 27-29). Applicants respectfully disagree with the Examiner's interpretation of BUYUKKOC et al. and GAI.

In step 840 of FIG. 8, a Routing Status Database (RSD) 804 selects a route for the call, and this routing is based on the source and destination information, the congestion status of potential routes, and the relative priority of the call (BUYUKKOC et al. at col. 19, lines 35-50). Applicants submit however, that this section of BUYUKKOC et al. relates to routing based on a comparison of congestion on different routes, regardless of the bandwidth for the signaling message, and therefore, this section of BUYUKKOC et al. does not relate, in any way, to calculating the bandwidth for the signaling message, and determining whether the calculated

bandwidth exceeds a requested bandwidth, as recited in amended claim 1. In addition, as described above, this section of BUYUKKOC et al. relates to selecting a route for a call among multiple possible routes, for example, based on a comparison of congestion levels in the various potential routes. Even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the RDS 804, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to routing a call by comparing congestion levels in different possible paths.

For at least these reasons, this section of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when

the calculated bandwidth does not exceed the requested bandwidth, as recited in amended claim 1.

In FIG. 10, BUYUKKOC et al. discloses that the RSD 924 receives a setup type message that identifies a two virtual channel identifier for channels X and Y (VCI/X and VCI/Y) and a virtual path identifier for path b (VPI/b) associated with VCI/Y, and the RSD 924 identifies path a (VPI/a) to associate with VCI/X (step 1035), and the RSD 924 internally maps channel/path combinations of to a call reference value Z (step 1040) (BUYUKKOC et al. at col. 20, lines 25-30). This section of BUYUKKOC et al. relates to routing a path on a channel regardless of the bandwidth for the call, and therefore, this section of BUYUKKOC et al. does not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the RDS 924, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth (for the call), as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11. Instead, as described above, the relative congestion levels in the potential routes are evaluated to decide a path for the call.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth.

Rather, as described above, this section of BUYUKKOC et al. relates to routing a call through virtual paths on virtual channels.

For at least these reasons, this section of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 13, lines 1-7, BUYUKKOC et al. states:

Edge nodes 620 query CRSDS 630 when a new call is originated, and provides CRSDS 630 with the origin and destination of the call. CRSDS 630 decides how to route the call, based on the status of the pre-determined routes, preferably selecting the least congested of the predetermined routes for the origin destination pair, and communicates this decision to the querying edge node 620, which then routes the call.

This section of BUYUKKOC et al., discloses, for example, that edge nodes 620 provide a central RDS server (CRSDS) 630 with an origin and destination for a call, and the CRSDS 630 determines a route for the call between predetermined routes based, for example, on congestion in the predetermined routes. This section of BUYUKKOC et al. relates to determining a route for a call, regardless of the bandwidth for the call, by comparing congestion on different routes, and therefore, this section of BUYUKKOC et al. does not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Furthermore, as described above, this section of BUYUKKOC et al. relates to selecting a route for a call, and even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling

message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the CRSDS 630, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11. Rather, as described above, this section of BUYUKKOC et al. relates to comparing congestion levels in different possible routes.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to the CRSDS 630 routing a call based on congestion levels in possible routes.

For at least these reasons, col. 13, lines 1-7 of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 13, lines 45-47, BUYUKKOC et al. states that "CRSDS 730 receives information from each RRSDS 740, and uses this information to compute the total bandwidth usage on each

α -link and each β -link.” Thus, this section of BUYUKKOC et al. discloses that the CRSDS 730 determines a route for the call over various links in a network, based on bandwidth usages on the various links. This section of BUYUKKOC et al. relates to comparing bandwidth between different links, regardless of the bandwidth for a transmitted message, and therefore, this section of BUYUKKOC et al. not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the CRSDS 730, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11. Rather, as described above, this section of BUYUKKOC et al. relates to determining bandwidth of each possible link for routing a call.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to the CRSDS 730 routing a call based on bandwidth levels in possible links for carrying the call.

For at least these reasons, col. 13, lines 45-47 of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises

an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 13, line 64-col. 14, line 67, BUYUKKOC et al. discloses, for example, that a CRSDS 630/730 stores information on the status of routes within a network and determines a route for a call based, for example, on congestion in the predetermined routes. This section of BUYUKKOC et al. relates to determining a route for a call, regardless of the bandwidth for the call, by comparing congestion on different routes, and therefore, this section of BUYUKKOC et al. not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Rather, as described above, this section of BUYUKKOC et al. relates to selecting a route for a call, and therefore, even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the CRSDS 630/730, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably

disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to the CRSDS 630/730 routing a call based on congestion levels in possible routes.

For at least these reasons, col. 13, line 64-col. 14, line 67 of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

Col. 14, line 7-col. 18, line 45, BUYUKKOC et al. discloses, for example, that the CRSDS 630/730 stores information on the status of routes within a network and determines a route for a call based, for example, on congestion in the predetermined routes. This section of BUYUKKOC et al. relates to determining a route for a call, regardless of the bandwidth for the call, by comparing congestion on different routes, and therefore, this section of BUYUKKOC et al. not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Rather, as described above, this section of BUYUKKOC et al. relates to selecting a route for a call, and even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the CRSDS 630/730, when selecting a

route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to the CRSDS 630/730 routing a call based on congestion levels in possible routes.

For at least these reasons, col. 14, line 7-col. 18, line 45 of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 17, line 30-40, BUYUKKOC et al. states:

A new call arrives at originating switch 270, which determines that the call is destined for switch 220. The (origination, destination) information is passed to the RSD, which contains the information shown in Tables VII-IX. If there are different possible bandwidth requirements for different types of calls, the bandwidth requirement is preferably also passed to the RSD. The RSD uses the information in Table IX to determine that the best route from switch 220 to switch 270 is B2, with a congestion status of "green."

This section of BUYUKKOC et al. discloses, for example, that an RSD receives information about a call, including bandwidth requirements for a call, and then routes the call based on the stored congestion information regarding possible pathways. Applicants submit that this section discloses receiving a bandwidth for call and not to calculating that bandwidth, as would be required of BUYUKKOC et al., based on the Examiner's interpretation of claims 1 and 11. Furthermore, routing a call based on congestion status of possible pathways does not disclose or suggest determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Rather, the routing, disclosed in this section of BUYUKKOC et al., depends on congestions levels and bandwidth requirements for the call, but does not, in any way, include a comparison of the bandwidth requirements for the call with a requested bandwidth associated with the call, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11. Thus, even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the RSD, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth.

Rather, as described above, this section of BUYUKKOC et al. relates to the RSD routing a call based on congestion levels in possible routes for the call.

For at least these reasons, col. 17, lines 30-40 of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 19, lines 25-40, BUYUKKOC et al. states:

FIG. 8 shows a call flow between an edge node 802 and an RSD 804 showing how the edge node obtains a VCI for the call from the RSD. For example, edge node 802 is analogous to an edge node 620 of FIG. 6, and RSD 804 is analogous to CRSDS 630 of FIG. 6. The message protocol used for RSD queries might be SS7, or it could be any other data network protocol.

In a first step 810, edge node 802 receives a new call.

In a second step 820, edge node 802 sends source and destination information to RSD 804. Depending on the features supported by RSD 804, edge node 802 may send additional information, such as the priority of the call or the bandwidth required by the call.

In a third step 830, RSD 804 receives the origin and destination information from edge node 802, and any other information sent as well.

In a fourth step 840, RSD 804 selects a route for the call, based on the source and destination information, as well as the congestion status of potential routes. This selection may be made using a method similar to Method 8, 9 or 10, as described above. The priority of the call may also be considered in selecting the route.

The section of BUYUKKOC et al. discloses, for example, that the RSD 804 selects a route for the call, and this routing is based on the source and destination information, the congestion status of potential routes, and the relative priority of the call. Applicants submit however, that this section of BUYUKKOC et al. relates to routing based on a comparison of congestion on different routes, regardless of the bandwidth for the signaling message, and therefore, this section of BUYUKKOC et al. does not relate, in any way, to calculating the bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. As described above, this section of BUYUKKOC et al. relates to selecting a route for a call among multiple possible routes, for example, based on a comparison of congestion levels in the various potential routes. Even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the RDS 804, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to routing a call by comparing congestion levels in different possible paths.

For at least these reasons, this section of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in amended claim 1.

At col. 21, lines 19-30, BUYUKKOC et al. states:

In a sixth step 1030, ATM switch 922 sends a "setup" type of message, such as a SETUP message or an IAM (initial address message), depending on the protocol, to ATM switch 924, requesting ATM switch 924 to assign a VCI within VPI X for a call with call reference Z. This setup message also indicates that VPI/VCI Y/b should be used for packets sent from ATM switch 924 to ATM switch 922 for the call.

In a seventh step 1035, ATM switch 924 receives the setup type message, and selects a VCI within VPI X for the call. This VCI is referred to as VCI a.

In an eighth step 1040, ATM switch 924 internally maps VPI/VCI X/a to VPI/VCI Y/b for call reference value Z.

This section of BUYUKKOC et al. discloses, for example, that the ATM switch 922 sends a setup type message that identifies a two virtual channel identifier for channels X and Y (VCI/X and VCI/Y) and a virtual path identifier for path b (VPI/b) associated with VCI/Y (step 1030), and an ATM switch 924 identifies path a (VPI/a) to be associated with VCI/X (step 1035), and the ATM switch internally maps channel/path combinations of to a call reference value Z (step 1040). This section of BUYUKKOC et al. relates to routing a path on a channel regardless of the bandwidth for the call, and therefore, this section of BUYUKKOC et al. does not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the

calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. This section of BUYUKKOC et al. relates to selecting and storing a route for a call. Even if, for the sake of argument, the call in BUYUKKOC et al. is considered to correspond to the recited signaling message (a point that Applicants do not concede), this section of BUYUKKOC et al. does not disclose or suggest that the ATM switch, when selecting a route for the call, calculates a bandwidth for the call or compares this bandwidth for the call with a requested bandwidth, as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to routing a call through virtual paths on virtual channels.

For at least these reasons, this section of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At Tables VII and VIII, BUYUKKOC et al. depicts current usage and threshold levels for various α -links and β -links. The Examiner appears to allege that the current usage and threshold levels for the links relate to congestions levels in the link (Office Action at pages 27-29), and as described above, the congestion levels for the α -links and β -links are used to route a path for the call regardless of the bandwidth for the call. This section of BUYUKKOC et al., therefore, does not relate, in any way, to calculating a bandwidth for the signaling message, and determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in amended claim 1. Rather, this section of BUYUKKOC et al. relates to data used to determine congestions levels in potential paths and does not disclose or suggest calculating a bandwidth for the call or comparing this bandwidth for the call with a requested bandwidth (associated with the call), as would be required of BUYUKKOC et al. based on the Examiner's interpretation of claims 1 and 11.

Furthermore, since this section of BUYUKKOC et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of BUYUKKOC et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of BUYUKKOC et al. relates to routing a call through virtual paths on virtual channels.

For at least these reasons, this section of BUYUKKOC et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and

determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

Despite the allegations by the Examiner in the Office Action at pages 29, the disclosure in GAI does not cure the above-described deficiencies in the disclosure of BUYUKKOC et al. with respect to the identified features in amended claim 1.

For example, at FIG. 4, GAI discloses, for example, a policy server 322, including a policy translator 410 with storage devices 412a-412c, a policy validation tool (PVT) 413, a policy rule generating engine 414 that are each in communication with the policy translator 410, a communication engine 418 exchange messages with switches and routers of a network, and a device-specific filter entity 416 that communicates with both the policy rule generating engine 414 and the communication engine 418 (GAI at col. 9, line 58-col. 10, line 9). This section of GAI does not disclose, in any way, that the disclosed policy server 322 calculates a bandwidth for the signaling message, and determines whether the calculated bandwidth exceeds a requested bandwidth, as would be required for GAI based on the Examiner's interpretation of claim 1. In fact, this section of GAI does not even mention the term "bandwidth."

Furthermore, since this section of GAI does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of GAI cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of GAI relates to a policy server 322.

For at least these reasons, this section of GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate

bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 4, line 50- col. 5, line 20, GAI states:

To interconnect dispersed computer networks, many organizations rely on the infrastructure and facilities of service providers. For example, an organization may lease a number of T1 lines to interconnect various LANs. These organizations typically enter into service level agreements with the service providers, which include one or more traffic specifiers. These traffic specifiers may place limits on the amount of resources that the subscribing organization will consume for a given charge. For example, a user may agree not to send traffic that exceeds a certain bandwidth (e.g., 1 Mb/s). Traffic entering the service provider's network is monitored (i.e., "policed") to ensure that it complies with the relevant traffic specifiers and is thus "in-profile". Traffic that exceeds a traffic specifier (i.e., traffic that is "out-of-profile") may be dealt with in a number of ways. For example, the exceeding traffic may be dropped or shaped. With shaping, the out-of-profile traffic is temporarily stored until the demand drops below the threshold. Another option is to mark the traffic as exceeding the traffic specifier, but nonetheless allow it to proceed through the network. If there is congestion, an intermediate device may drop this "marked" or down graded traffic first in an effort to relieve the congestion. Another option is to change the accounting actions for this out-of-profile traffic (i.e., charge the user a higher rate).

Allocation of Network Resources

As shown, computer networks include numerous services and resources for use in moving traffic around the network. For example, different network links, such as Fast Ethernet, Asynchronous Transfer Mode (ATM) channels, network tunnels, satellite links, etc., offer unique speed and bandwidth capabilities. Particular intermediate devices also include specific resources or services, such as number of priority queues, filter settings, availability of different queue selection strategies, congestion control algorithms, etc. Nonetheless, these types of resources or services are highly device-specific.

This section of GAI discloses, for example, that a service provider allocates a limited amount of bandwidth to a user for access to a network, which includes multiple devices with different

bandwidth capabilities, and that the service provider can drop a user's communication when that user exceeds the allocated bandwidth. This section of GAI does not disclose, in any way, calculating a bandwidth for the signaling message, as recited in amended claim 1. Rather, this section of GAI discloses that a service provider drops a communication (regardless of the bandwidth for that communication) when the user exceeds an allocated bandwidth. Moreover, this section of GAI does not disclose or suggest either a calculated bandwidth for a communication or a request bandwidth, this section of GAI cannot be reasonably construed to disclose or suggest determining whether the calculated bandwidth exceeds a requested bandwidth

Furthermore, since this section of GAI does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of GAI cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of GAI discloses that a service provider drops a communication (regardless of the bandwidth for that communication) when the user exceeds an allocated bandwidth.

For at least these reasons, this section of GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 13, line 60, GAI states that policy rules are generated based on selected high-level policies. This section of GAI does not disclose or suggest specifics regarding the generated policy rules or the high-level policies. Accordingly, this section of GAI cannot be reasonably construed to disclose or suggest either calculating a bandwidth for the signaling message, or determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in claim 1.

Furthermore, since this section of GAI does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of GAI cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of GAI merely discloses that policy rules are generated based on selected high-level policies.

For at least these reasons, this section of GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

Col. 14, lines 1-24, GAI states:

Policy translator 410 examines the high-level policies and corresponding data structures and may perform certain initial processing. For example, to the extent the user table 710 lists individual or group network users by title or department, the policy translator 410 may identify the actual users and obtain their IP

addresses and/or corresponding subnet masks. For example, by accessing the repository 326 and/or other information resources, such as DHCP server 329, the policy translator 410 may enter additional information in table 710. In particular, the policy translator 410 may query the repository 326 or DHCP server 329 to obtain the CEO's name, IP address and IP mask. This information may then be inserted in the corresponding entries of user table 710. Similar information, where appropriate, may be obtained for groups, such as the marketing, administrative and executive departments, from repository 326 or DHCP server 329, and entered into user table 710. The policy translator 410 may employ a conventional database query-response application such as SQL and the Light weight Directory Access Protocol (LDAP) to communicate with the repository 326 and DHCP server 329. Alternatively, the policy translator 410 may be pre-configured with such information.

This section of GAI discloses, for example, that a translator component 410, in a policy server 322, examines high level policies and performs initial processing on a user table 710 to identify relevant users or to add additional data. Applicants submit that this section of GAI cannot, conceivably, be construed to disclose or suggest either calculating a bandwidth for the signaling message, or determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in claim 1. In particular, this section of GAI does not mention any type of bandwidth related to any type of communications.

Furthermore, since this section of GAI does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of GAI cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of GAI relates to a translator component 410 that examines high levels policies and performs initial processing on a user table 710 to identify relevant users or to add additional data.

For at least these reasons, this section of GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate

bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 18, lines 45-65, GAI states

At the policy server 322, the Configuration Request message is received at the corresponding communication engine 418 and handed to the device-specific filter entity 416. The device-specific filter entity 416 examines the Configuration Request to determine what types of network resources and services are available at router 318 and what roles if any are associated with its interfaces. In particular, the device-specific filter entity 416 determines that router 318 supports both RED and tail dropping, has five queues with two settable thresholds per queue and an interface whose role is to police and shape traffic from a subscribing network. Based on this determination, the device-specific filter entity 416 obtains a particular set of transactions and/or rules from the policy rule generating engine 414 that corresponds to the network services and resources available at router 318. For example, the device-specific filter entity 416 may obtain one or more classification rules instructing router 318 to classify packets from a given source (e.g., domain 304) with a given DS codepoint and/or QoS label. Rules for policing and shaping traffic from domain 304 may also be obtained.

This section of GAI discloses, for example, that a device-specific data entity 416, in a policy server 322, receives a configuration request message and evaluates the configuration request message for a network device, such as router 318. Based on this evaluation, the device-specific data entity 416 obtains and provides specific rules to the router 318. Since this section of GAI does not mention any type of communications bandwidth, Applicants submit that this section of GAI cannot, conceivably, be construed to disclose or suggest either calculating a bandwidth for the signaling message, or determining whether the calculated bandwidth exceeds a requested bandwidth, as recited in claim 1.

Furthermore, since this section of GAI does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of GAI cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of GAI relates to the device-specific data entity 416 that processes and general configuration request message and provides specific rules to a particular router 318.

For at least these reasons, this section of GAI does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

For at least the foregoing reasons, Applicants submit that claim 1 is patentable over BUYUKKOC et al. and GAI, whether considered alone or in any reasonable combination. Pending claims 2, 3, 5, and 12 depend from claim 1. Therefore, these claims are patentable over BUYUKKOC et al. and GAI, whether considered alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

Independent claims 14 and 39, as amended, recite features similar to (yet possibly of different scope than) features described above with respect to claim 1. Therefore, Applicants submit that claims 14 and 39 are patentable over BUYUKKOC et al. and GAI, whether considered alone or in any reasonable combination, for at least reasons similar to reasons given

above with respect to claim 1. Furthermore, Applicants submit that claims 14 and 39 are patentable over BUYUKKOC et al. and GAI for reasons of their own.

Claims 14 and 39 are amended, herein, to include features substantially similar to features previously recited in claims 30 and 57 (canceled herein). The Examiner rejected claims 30 and 57 under 35 U.S.C. § 103(a) as allegedly obvious in view of BUYUKKOC et al., GAI, and SMITH et al. As noted above, Applicants submit that claims 14 and 39 are patentable over BUYUKKOC et al. and GAI, whether considered alone or in any reasonable combination, for at least reasons similar to reasons given above with respect to claim 1. In rejecting claims 30 and 57, the Examiner relies on the sections of BUYUKKOC et al. and GAI, identified above in the discussion of claim 1, and further relies on SMITH et al. at the Abstract, FIGS. 1 and 2, and at col. 9, lines 5-45 (Office Action at pages 54-56). Applicants respectfully submit that these sections of SMITH et al. do not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14 and 39.

At the Abstract, SMITH et al. states:

In a broadband switching system for the switching of asynchronously transferred cells of data, a dynamic bandwidth controller (DBC) controls the application of data cells to an input port of the system. Data cells are supplied by a number of transmitting end-systems. When an end-system begins transmitting data cells, the DBC detects the presence of incoming cells and requests bandwidth from a connection admission control (CAC) forming part of the system. The switching system stores a table associating a number of signal sources connected to the ingress with respective predetermined transmission bandwidths and, preferably also, maximum delay times. When arrival of cells from one of the sources at the input port is detected, the DBC sends a request signal for the relevant predetermined bandwidth to the CAC and delays transmission of the cells until at least the predetermined bandwidth is allocated. This delay is typically effected by sending a cell rate indicator signal back to the input port for placing the source in a halt mode. If no allocation of bandwidth has occurred before the respective maximum delay time, bandwidth is allocated by robbing bandwidth from other signal sources.

This section of SMITH et al. discloses, for example, that a dynamic bandwidth controller (DBC) detects that an input port receives data cells from one or more sources and requests transmission bandwidth, according to bandwidth amounts associated with each of the sources. The DBC causes the input port to hold the data cells until the bandwidth is allocated. Applicants submit that this section of SMITH et al. does not relate, in any way, to calculating a bandwidth for the signaling message. Rather, this section of SMITH et al. discloses that bandwidth is associated with the data sources, regardless of the bandwidth required for a transmission. Moreover, this section of SMITH et al. does not disclose or suggest any type of comparison between a calculated bandwidth for the data cells from the sources and the requested bandwidths from the input port, as would be required of SMITH et al. based on the Examiner's interpretation of canceled claims 30 and 57.

Furthermore, since this section of SMITH et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of SMITH et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of SMITH et al. relates to holding data cells at an input port until sufficient bandwidth, associated with sources for the data cells, is allocated to the input port.

For at least these reasons, this section of SMITH et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message,

determining whether the calculated bandwidth exceeds a requested bandwidth, and determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

At col. 9, lines 5-45, SMITH et al. discusses FIGS. 1 and 2 and states:

The CAC 18 is then sent a request for bandwidth. This is interpreted by the CAC 18 as a request for the predetermined bandwidth associated with the end-system. If this bandwidth cannot be granted, the end-system is kept in a halt state, the cells already received by the DBC are buffered (by setting the shaper module 42 rate to zero) and a timer is started for monitoring for how long the cells are buffered.

The CAC 18 periodically (preferably at periods just less than the maximum time for which cells are buffered by the shaper) attempts to find the requested bandwidth and offers it to the DBC, which in turn offers it to the end-system in the form of a signal via the feedback module 44. When the end-system 14 takes up the offer of bandwidth, the bandwidth is allocated, and the shaper is notified of the CR corresponding to the allocated bandwidth. If the CAC 18 cannot find the bandwidth, it may remove bandwidth allocation from other end-systems to obtain sufficient bandwidth to be allocated. Suitable bandwidth balancing techniques for use in the CAC, are described below.

If the timer expires before bandwidth can be allocated, the cells held in the DBC (in the buffer) are deleted. In this case, the end-system knows that the cells have been deleted since it also has a timer and unless a CR is fed-back within a predetermined time, it assumes that bandwidth cannot be allocated and that the few cells which were sent before the halt signal was received, have been deleted.

If the CAC 18 needs to remove the bandwidth, the whole bandwidth is removed and the end-system is halted as described above.

As a strategy which is an alternative to the detection of cells before bandwidth is allocated, the CAC 18 may continuously poll end-systems to offer bandwidth (to the predetermined level required by an end-system) to the end-system via the DBC. If the end-system starts transmitting, the bandwidth is allocated.

This polling, offer and acceptance procedure may also be used to cause transmission to re-start after an end-system has been halted as described above.

This section of SMITH et al. discloses, for example, that a connection admission control (CAC) allocates bandwidth associated with an end-system and that the DBC buffers received data cells until the bandwidth is allocated. This section of SMITH et al. further discloses that if the CAC

does not allocated the bandwidth within a particular amount of time, the buffered data cells are deleted by the DBC. Applicants submit that this section of SMITH et al. does not relate, in any way, to calculating a bandwidth for the signaling message. Rather, this section of SMITH et al. discloses that bandwidth is associated with the end systems that are the source of the data cells, regardless of the bandwidth required for a transmission. Moreover, this section of SMITH et al. does not disclose or suggest any type of comparison between a calculated bandwidth for the data cells from the end systems and the requested bandwidths from the input port, as would be required of SMITH et al. based on the Examiner's interpretation of canceled claims 30 and 57. Rather, as described above, this section of SMITH et al. relates to comparing requested bandwidth to the input port to actual allocated bandwidth.

Furthermore, since this section of SMITH et al. does not disclose or suggest either calculating a bandwidth for the signaling message or determining whether the calculated bandwidth exceeds a requested bandwidth, this section of SMITH et al. cannot reasonably disclose or suggest that determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth. Rather, as described above, this section of SMITH et al. relates to holding data cells at an input port until sufficient bandwidth, associated with end systems for the data cells, is allocated to the input port.

For at least these reasons, this section of SMITH et al. does not disclose or suggest that one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and that determining whether the policy condition associated with each policy feature is satisfied comprises: calculating a bandwidth for the signaling message, determining whether the calculated bandwidth exceeds a requested bandwidth, and determining

that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth, as recited in claim 1.

For at least these additional reasons, claims 14 and 39 are patentable over BUYUKKOC et al. and GAI (and over BUYUKKOC et al., GAI, and SMITH et al.).

Claims 15, 16, 18, and 31 depend from claim 14, and therefore, are patentable over BUYUKKOC et al. and GAI (and over BUYUKKOC et al., GAI, and SMITH et al.), whether considered alone or in any reasonable combination, for at least the reasons given above with respect to claim 14.

Claims 42, 43, 45, and 58 depend from claim 39, and therefore, are patentable over BUYUKKOC et al. and GAI (and over BUYUKKOC et al., GAI, and SMITH et al.), whether considered alone or in any reasonable combination, for at least the reasons given above with respect to claim 39.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-3, 5, 12, 14-16, 18, 31, 39, 42, 43, 45, and 58 under 35 U.S.C. § 103(a) based on BUYUKKOC et al. and GAI.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and NOAKE et al.

Claims 4 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of NOAKE et al. Applicants respectfully traverse this rejection.

Claim 4 depends from claim 1. The disclosure of NOAKE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that claim 4 is patentable over BUYUKKOC et al., GAI,

and NOAKE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 4 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and NOAKE et al.

Claim 17 depends from claim 14. The disclosure of NOAKE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that claim 17 is patentable over BUYUKKOC et al., GAI, and NOAKE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 17 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and NOAKE et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and CHRISTIE et al.

Claims 6, 8, 9, 19-21, 23-26, 46-48, and 50 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of CHRISTIE et al. Applicants respectfully traverse this rejection.

Claims 6, 8, and 9 depend from claim 1. While not acquiescing in the rejection of claims 6, 8, and 9, Applicants submit that the disclosure of CHRISTIE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that claims 6, 8, and 9 are patentable over BUYUKKOC et al., GAI, and CHRISTIE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Accordingly, Applicants respectfully

request that the Examiner reconsider and withdraw the rejection of claims 6, 8, and 9 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and CHRISTIE et al.

Claims 19-21 and 23-26 depend from claim 14. While not acquiescing in the rejection of claims 19-21 and 23-26, Applicants submit that the disclosure of CHRISTIE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that these claims are patentable over BUYUKKOC et al., GAI, and CHRISTIE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 19-21 and 23-26 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and CHRISTIE et al.

Claims 46-48 and 50 depend from claim 39. While not acquiescing in the rejection of claims 46-48 and 50, Applicants submit that the disclosure of CHRISTIE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that claims 46-48 and 50 are patentable over BUYUKKOC et al., GAI, and CHRISTIE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 46-48 and 50 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and CHRISTIE et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and FARRIS et al.

Claims 7, 22, and 49 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of FARRIS et al. Applicants respectfully traverse this rejection.

Claim 7 depends from claim 1. While not acquiescing in the rejection of claim 7, Applicants submit that the disclosure of FARRIS et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and FARRIS et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 7 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and FARRIS et al.

Claim 22 depends from claim 14. While not acquiescing in the rejection of claim 22, Applicants submit that the disclosure of FARRIS et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and FARRIS et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 22 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and FARRIS et al.

Claim 49 depends from claim 39. While not acquiescing in the rejection of claim 49, Applicants submit that the disclosure of FARRIS et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 39. Therefore,

Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and FARRIS et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 49 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and FARRIS et al.

***Rejection under 35 U.S.C. § 103(a) based on
BUYUKKOC et al. GAI, and one of VANDERVORT et al. or HORN et al.***

Claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of VANDERVORT et al. or HORN et al. Applicants respectfully traverse this rejection.

Claim 10 depends from claim 1. While not acquiescing in the rejection of claim 10, Applicants submit that the disclosures of VANDERVORT et al. and HORN et al. do not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and VANDERVORT et al. and over BUYUKKOC et al., GAI, and HORN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 10 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and VANDERVORT et al./HORN et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and BASSO et al.

Claims 13, 38, and 65 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of BASSO et al. Applicants respectfully traverse this rejection.

Claim 13 depends from claim 1. While not acquiescing in the rejection of claim 13, Applicants submit that the disclosure of BASSO et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 1. Therefore, Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and BASSO et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 13 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and BASSO et al.

Claim 38 depends from claim 14. While not acquiescing in the rejection of claim 38, Applicants submit that the disclosure of BASSO et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and BASSO et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 38 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and BASSO et al.

Claim 65 depends from claim 39. While not acquiescing in the rejection of claim 65, Applicants submit that the disclosure of BASSO et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 39. Therefore,

Applicants submit that this claim is patentable over BUYUKKOC et al., GAI, and BASSO et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 65 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and BASSO et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KOBAYASHI et al.

Claims 27-29 and 54-56 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of KOBAYASHI et al. Applicants respectfully traverse this rejection.

Claims 27-29 depend, ultimately, from claim 14. While not acquiescing in the rejection of claims 27-29, Applicants submit that the disclosure of KOBAYASHI et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that claims 27-29 are patentable over BUYUKKOC et al., GAI, and KOBAYASHI et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 27-29 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KOBAYASHI et al.

Claims 54-56 depend from claim 39. While not acquiescing in the rejection of claims 54-56, Applicants submit that the disclosure of KOBAYASHI et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 39. Therefore, Applicants submit that claims 54-56 are patentable over BUYUKKOC et al., GAI, and KOBAYASHI et al., whether taken alone or in any reasonable combination, for at

least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 54-56 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KOBAYASHI et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and SMITH et al.

Claims 30 and 57 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of SMITH et al. Without acquiescing in the Examiner's allegations, Applicant submits that the rejection of claims 30 and 57, under 35 U.S.C. § 103(a), is moot in light of the cancellation of claims 30 and 57. Applicant, therefore, respectfully requests the Examiner's reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection of claims 30 and 57 as allegedly unpatentable over BUYUKKOC et al., GAI, and SMITH et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KILKKI et al.

Claims 32-37 and 59-64 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of KILKKI et al. Applicants respectfully traverse this rejection.

Claims 32-37 depend, ultimately, from claim 14. While not acquiescing in the rejection of claims 32-37, Applicants submit that the disclosure of KILKKI et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 14. Therefore, Applicants submit that claims 32-37 are patentable over BUYUKKOC et al., GAI, and KILKKI et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14. Accordingly, Applicants respectfully request

that the Examiner reconsider and withdraw the rejection of claims 32-37 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KILKKI et al.

Claims 59-64 depend, ultimately, from claim 39. While not acquiescing in the rejection of claims 59-64, Applicants submit that the disclosure of KILKKI et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI set forth above with respect to claim 39. Therefore, Applicants submit that claims 59-64 are patentable over BUYUKKOC et al., GAI, and KILKKI et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 59-64 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and KILKKI et al.

Rejection under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI, and NOAKE et al.

Claim 44 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over BUYUKKOC et al. in view of GAI, and in further view of NOAKE et al. Applicants respectfully traverse this rejection.

Claim 44 depends from claim 39. While not acquiescing in the rejection of claim 44, Applicants submit that the disclosure of NOAKE et al. does not remedy the deficiencies in the disclosures of BUYUKKOC et al. and GAI et al. set forth above with respect to claim 39. Therefore, Applicants submit that claim 44 is patentable over BUYUKKOC et al., GAI et al., and NOAKE et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 39. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 44 under 35 U.S.C. § 103(a) based on BUYUKKOC et al., GAI et al., and NOAKE et al.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such assertions (e.g., whether a reference constitutes prior art, reasons to modify a reference and/or to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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